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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/522,729

02/01/2005

Andrea Bianco

36-1878

8466

23117 7590 01/21/2009  
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EXAMINER

ZHU, BO HUI ALVIN

ART UNIT

PAPER NUMBER

2419

MAIL DATE

DELIVERY MODE

01/21/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/522,729	<b>Applicant(s)</b> BIANCO ET AL.	
	<b>Examiner</b> BO HUI A. ZHU	<b>Art Unit</b> 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

1. The amendment filed on October 22, 2008 has been entered.  
  
Claims 1 – 8 are pending.  
  
Claims 1 – 8 are rejected.  
  
The double patenting rejection of claim 1 has been withdrawn.

***Claim Objections***

2. Claim 1 is objected to because its status indicator is incorrect. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hill (Application publication No. WO 01/67803A1).

Regarding claim 1, Hill discloses a method of allocating switch requests within a packet switch (See page 4, lines 12-14, allocating switch requests), the method comprising the steps of

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- (a) generating switch request data for each input port indicative of the output ports to which data packets are to be transmitted (See page 4, line 15, generating switch request);
- (b) processing the switch request data for each input port to generate request data for each input port-output port pairing (See page 4, lines 16-17, processing switch request); and
- (c) generating an allocation plan by sorting the request data R relating to each of the input/output pairs in terms of their queue length (See page 4, lines 17-22 organization request), and
- (d) for each input/output pair, considered in the sorted order, allocating as many of the requests in the queue as can be accommodated in the remaining time slots (See page 4, lines 17-22, allocating requests).

Regarding claim 2, Hill discloses a method of packet switching wherein the packets are switched on the basis of the allocated routing, and to a packet switch in which the input port-output port routing is allocated in accordance with claim 1, and packets are switched from an input port to a specified output port in accordance with the allocated routing (See page 5, lines 3-8).

Regarding claim 3, Hill discloses a method according to claim 1, in which unallocated switch requests are reserved for use in the next phase of switch request allocation, or abandoned if they have exceeded a predetermined expiry time (See page

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5, lines 19-20 and lines 6-7).

Regarding claim 4, Hill discloses a method according to claim 1, comprising a preliminary stage in which the number of requests for each input or output port is reduced by a factor such that the number of requests relating to that port is no greater than the number of available time slots (See page 4, lines 24-29).

Regarding claim 5, Hill discloses a method according to claim 1, comprising a preliminary stage in which the number of requests in respect of each input/output pair are reduced by a single common factor such that the number of requests relating to all ports is no greater than the number of available time slots (See page 4, lines 24-29).

Regarding claim 6, Hill discloses a method of packet switching wherein the input port-output port routing is allocated according to the method of claim 1 and the packets are switched on the basis of the allocated routing (See page 4, lines 21-23 and line 29).

Regarding claim 7, Hill discloses a packet switch in which the input port-output port routing is allocated in accordance with the method of claim 1 (See page 4, lines 21-23 and line 29).

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Regarding claim 8, Hill discloses a packet switch according to claim 7, wherein packets are switched from an input port to a specified output port in accordance with the allocated routing (See page 4, lines 30-32 and page 5 lines 3-7).

### ***Response to Arguments***

4. Applicant's arguments filed on October 22, 2008 have been fully considered but they are not persuasive. With regard to claims 1 - 8, Applicants argue that Hill merely discloses the number of requests are reduced to a point at least the remaining ones can be allocated, but does not disclose sorting the data requests by queue length or of determining in what order the individual queues are to be considered, as required by claim 1 (Remarks, page 6). Examiner respectfully disagrees. Claim 1 merely recites "sorting the request data R relating to each of the input/output pairs in terms of their queue length". Hill teaches comparing the number of requests with the maximum request capacity of each input port and each output port; and allocating all requests for those input-output pairs where the total number of requests is less than or equal to the maximum request capacity of each input port and each output port (page 4, lines 17 - 22). Thus, based on the teachings of Hill, requests are organized in terms of a capacity value of each input port and output port. With or without broad interpretation, Examiner believes that the cited prior art can both properly and reasonably be applied to the claim limitation.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BO HUI A. ZHU whose telephone number is (571)270-1086. The examiner can normally be reached on Mon-Thur 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BO HUI A ZHU  
Examiner, Art Unit 2419  
January 13, 2009

/Hassan Kizou/  
Supervisory Patent Examiner, Art Unit 2419